

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-16 (canceled)

Claim 17 (canceled)

Claim 18 (previously added) A patterned conductive polymer surface comprising:
a substrate; and
a patterned conductive polymer on said substrate, wherein said patterned conductive polymer includes the unexposed regions of a conductive polymer which is partially directly exposed to irradiation.

Claim 19 (currently amended) The patterned conductive polymer surface of claim 18 wherein an adhesion property between the polymer and substrate is ~~modified~~ weakened upon irradiation.

Claim 20 (new) The patterned conductive polymer surface of claim 18, wherein said substrate is selected from the group consisting of glass, quartz, silica, silicon, silicon nitride, alumina, aluminum nitride, titania, titanium nitride, diamond, waxes, polyesters, polyvinylacetates, polyolefins, polyethers, polyvinylmethylether, polyvinylbutylethers, polyamides, polyacrylamides, polyimides, polycarbonates, polysulfones, polyketones, fluoropolymers, aromatic hydrocarbon polymers, acrylate and acrylic acid polymers, phenolic polymers, polyvinylalcohols, polyamines, polypeptides, siloxane polymers, polyvinylchlorides, polyvinylbenzylchlorides, polychlorostyrenes, polyvinylbutyrals, copolymers thereof, and mixtures thereof.

Claim 21 (new) The patterned conductive polymer surface of claim 18, wherein said conducting polymer is selected from the group consisting of cis and trans polyacetylenes, polythiophenes, polydiacetylenes, polyparaphenylenes, polypyrroles, polybithiophenes, polyisothiophenes, polyphenylvinlenes, polythienylvinlenes, polyphenylenesulfides, polyanilines, derivatives thereof, and mixtures thereof.

Claim 22 (new) The patterned conductive polymer surface of claim 18, wherein said conducting polymer is PEDOT:PSS.

Claim 23 (new) The patterned conductive polymer surface of claim 18, wherein said irradiation is ultraviolet radiation.

Claim 24 (new) The patterned conductive polymer surface of claim 18, wherein the wavelength of said irradiation is < 400 nm.

Claim 25 (new) The patterned conductive polymer surface of claim 18, wherein an adhesion property between the polymer and the substrate is weakened upon irradiation.

Claim 26 (new) A patterned conductive polymer surface formed by the process of:

- forming a surface of a conducting polymer on a substrate;
- applying a mask to said surface;
- applying irradiation to form regions of exposed conducting polymer and regions of unexposed conducting polymer;

removing said mask; and

gently removing by non-chemically reactive means said regions of exposed conducting polymer.

Claim 27 (new) The patterned conductive polymer surface of claim 26, wherein said substrate is selected from the group consisting of glass, quartz, silica, silicon, silicon nitride, alumina, aluminum nitride, titania, titanium nitride, diamond, waxes, polyesters, polyvinylacetates, polyolefins, polyethers, polyvinylmethylether, polyvinylbutylethers, polyamides, polyacrylamides, polyimides, polycarbonates, polysulfones, polyketones, fluoropolymers, aromatic hydrocarbon polymers, acrylate and acrylic acid polymers, phenolic polymers, polyvinylalcohols, polyamines, polypeptides, siloxane polymers, polyvinylchlorides, polyvinylbenzylchlorides, polychlorostyrenes, polyvinylbutyrals, copolymers thereof, and mixtures thereof.

Claim 28 (new) The patterned conductive polymer surface of claim 26, wherein said conducting polymer is selected from the group consisting of cis and trans polyacetylenes, polythiophenes, polydiacetylenes, polyparaphenylenes, polypyrroles, polybithiophenes, polyisothiophenes, polyphenylvinlenes, polythienylvinlenes, polyphenylenesulfides, polyanilines, derivatives thereof, and mixtures thereof.

Claim 29 (new) The patterned conductive polymer surface of claim 28, wherein said conducting polymer is doped.

Claim 30 (new) The patterned conductive polymer surface of claim 26, wherein said

conducting polymer is polypyrrole.

Claim 31 (new) The patterned conductive polymer surface of claim 26, wherein said conducting polymer is polyaniline.

Claim 32 (new) The patterned conductive polymer surface of claim 26, wherein said conducting polymer is polythiophene.

Claim 33 (new) The patterned conductive polymer surface of claim 26, wherein said conducting polymer is PEDOT:PSS.

Claim 34 (new) The patterned conductive polymer surface of claim 26, wherein said irradiation is ultraviolet radiation.

Claim 35 (new) The patterned conductive polymer surface of claim 26, wherein the wavelength of said irradiation is < 400 nm.

Claim 36 (new) The patterned conductive polymer surface of claim 26, further comprising the step of using an adhesion promoter.

Claim 37 (new) The patterned conductive polymer surface of claim 26, wherein said step of removing said regions of exposed conducting polymer is by sonicating.

Claim 38 (new) The patterned conductive polymer surface of claim 37, wherein said

sonicating is in a mild solvent, an alcoholic solution, water, or any combination thereof.

Claim 39 (new) The patterned conductive polymer surface of claim 26, wherein said step of removing said regions of exposed conducting polymer is by spray washing with a mild solvent, an alcoholic solution, water, or any combination thereof.

Claim 40 (new) The patterned conductive polymer surface of claim 26, wherein said step of removing said regions of exposed conducting polymer is by wiping, rubbing, taping, or blowing.

Claim 41 (new) The patterned conductive polymer surface of claim 26, wherein an adhesion property between the polymer and the substrate is weakened upon irradiation.